manual

DVR **+ wireless setup**

SWIMPRO®

performanceswimmingcameras

contents

1. SwimPro DVR Remote Control Layout 3

2. SwimPro Typical Setup Diagram 4

3. Quick SUPER-USER Operation Print-out 5

4. Your SwimPro 4Cam Recorder - How Recording Works 6

5. Getting Started 7

6. Record Video 9

7. View 1,2 or 4 Cameras 9

7.1 View 1 or 4 Cameras 9

7.2 View 2 Cameras - Picture in Picture (PIP) Mode 9

8. Video Playback Mode 10

8.1 Rewind Video & Reverse Analyse Video 12

8.2 Fast Forward & Forward Analysis Video 12

9. Training Calendar Video Playback Mode 13

10. Delayed Playback/Time Shift 15

11. Download to USB/External Hard drive 15

11.1 Download 2, 3 or 4 Cameras to USB (PC) 15

11.1.1 Create Individual Video Files from 2, 3 or 4 Camera Recordings (Mac and PC) 17

11.2 Download Single Camera to USB (Mac and PC) 17

12. Automatic Delete 18

13. Microphone/Audio Setup 18

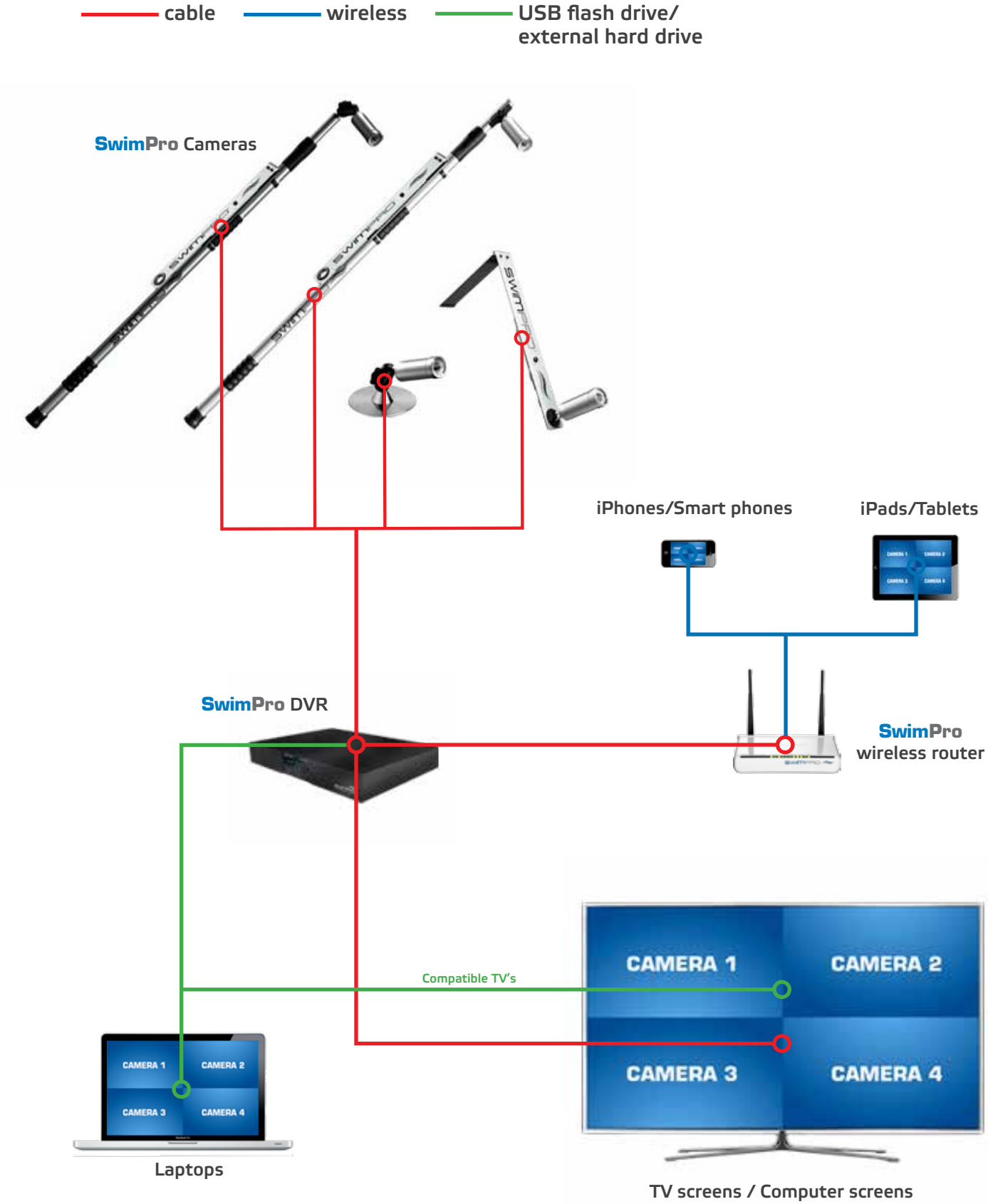
13. iPad/iPhone/Tablet/Smartphone Connectivity 20

1. SwimPro DVR Remote Control Layout

BUTTONS

1) **REC/Stop:** Record start/stop
2) **1,2,3 or 4:** Single Camera > 1, 2, 3 or 4 selection
3) **Audio:** Adjust audio overlay settings
4) **Backup:** Download to USB/external hard drive
5) **Menu:** Advanced settings menu + menu '**back**' button
6) **OSD:** Turn screen display On/Off
7) **Z/F:** Zoom into single camera and pan using up, left, right & down
8) **Left, Right, Up, Down** & **Enter:** Navigation buttons for menus and zoom and pan function
9) **Search:** Find a recorded video file, video playback function, delayed playback function
10) **Rewind:** Rewind video, backward slow motion
11) **Play/Pause:** Play video, pause video.
12) **Fast Forward:** Fast forward video, forward slow motion
13) **Stop:** Stop video, return to live video
14) **PIP:** Picture in picture style, display two cameras only.
15) ☐ : Single camera view
16) ⊞ : Quad camera view

2. SwimPro Typical Setup Diagram



3. Quick SUPER-USER operation print-out

1. Record Video - preferred operation device - *Remote*

- Press '**REC/Stop**'

2. Delayed playback - preferred operation device - *Remote*

- Press '**Search**'

- Select GO TO LAST

Notes: Delayed playback mode entered. Select a camera to show full screen, press 4 channel button on remote to go back to 4Cam view. Pause, fast forward and rewind to increase or decrease delay time ' *' indicates playback mode.*

3. Analysis - preferred operation device - *Remote or Mouse*

- Press '**Search**'

- Select GO TO LAST

Press Pause, fast forward and rewind scan through video ' *' indicates playback mode. Use the step button '* *' to frame-by-frame analyse.*

4. Download to PC or MAC via USB thumb drive or external hard drive - preferred operation device - *Remote and/or Mouse*

- Plug in USB storage device

- Press '**Backup**' on the remote

- Choose your training time period

- Select TO AVI (supported by both PC and MAC)

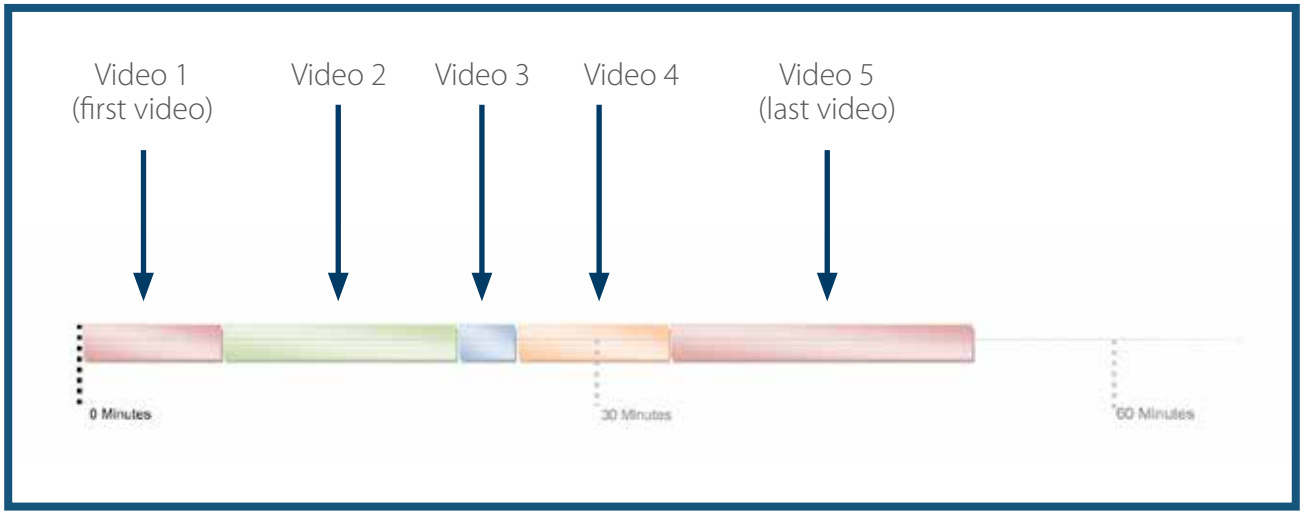
- Select your channel (for AVI, 1 channel per download)

- Select '**Backup**'

4. Your SwimPro 4Cam Recorder – How Recording Works

SwimPro 4Cam records video to 1 main video file on the hard drive and appends your video along a video timeline.

Video File Timeline - This is the way that the SwimPro 4Cam records to the file on the hard drive.



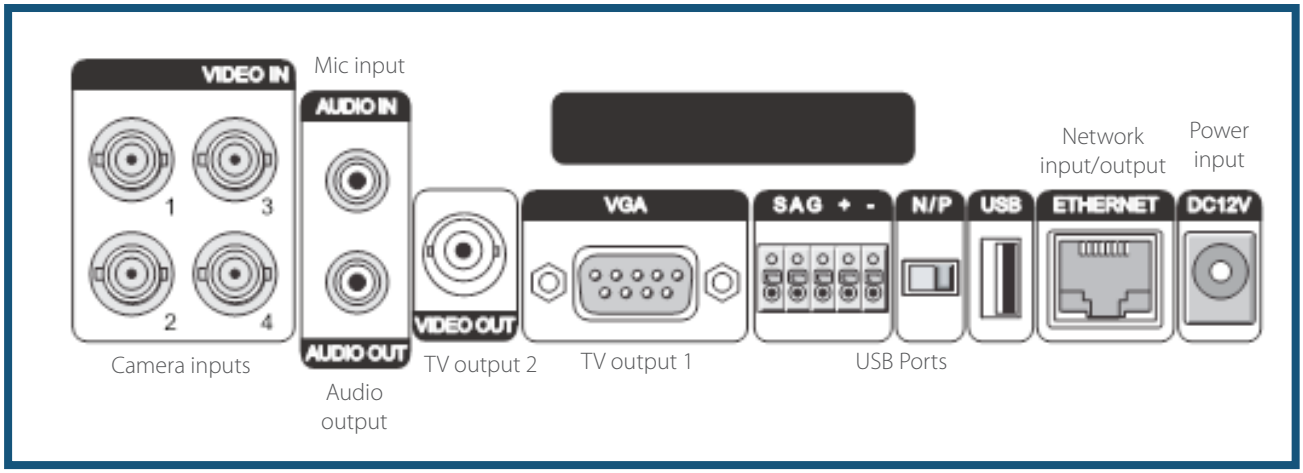
Remote Control Operation - Press '**REC/Stop**' button (Record and Stop Record) to start recording a video and stop recording a video.

EXAMPLE: Press '**REC/Stop**' to start the video then procced to record some video footage. Press '**REC/Stop**' again to stop the video. This will be *video 1*. Repeat to make *video 2*, and so on.

5. Getting Started

1. Ensure that all devices are powered up and plugged into the back of the 4Cam DVR correctly as shown below. *NOTE: Use TV Output 1 for a higher resolution picture*).

Plug a USB mouse into the front of the recorder to use as an additional device controller to the remote control if you prefer. *NOTE: Plug the USB mouse into the back of the recorder to use as a preferred navigational tool to the remote control.*



2. Turn the system on. Enter the password '0000'. At this point, if plugged into the unit correctly, you will be presented with a screen divided into 4 cameras.

NOTE: The Swim Pro 4Cam recorder has password 'lock out' abilities. This allows privacy for swimmers and ensures equipment is not tampered with or interrupted during a session. By selecting LOG OUT in the main menu, a password is required to re-enter the system.

3. SETTING THE TIME

IMPORTANT NOTE: *Depending on how you plan to use the device, this step is very important for time stamping your recordings, recalling your recordings by date and time, the delayed playback function etc.*

a. Press '**Menu**' and select SETUP by navigating up or down and press '**Enter'** when SETUP is highlighted

b. Select SYSTEM by navigating up or down and pressing '**Enter**'

c. Select TIME by navigating up or down and pressing '**Enter**'. You should now see the SYSTEM – TIME screen

d. Scroll up and down and press '**Enter**' on the setting that you wish to change

e. Press '**Menu**' a number of times to return to the home screen when completed.

*NOTE: To return to the quad view home screen from any screen, press the '**Menu**' button to move back through previous steps. The menu button doubles as a '**Menu**' and a '**Back**' button.*

6. Record Video

1. Press '**REC/Stop**' to initiate recording. You will see 4 small red dots appear on the TV above each camera view when device is recording. A small red LED will be illuminated on the front side of the recorder under the label 'REC' when device is recording
2. Press '**REC/Stop**' to stop recording.

NOTE: Individual or multiple cameras can be viewed and analysed in single or in 4Cam view when device is recording or not recording.

Recording	*Red*
Not Recording	*Blank*

7. View 1, 2 or 4 Cameras

5.1 View 1 or 4 Cameras

1. Press the corresponding button to the camera you wish to view

   EXAMPLE: Press button '**2**' to select camera 2
2. To return to quad view, press the '⊞' button.

NOTE: Single or all 4 cameras can be viewed and analysed individually or in 4Cam view when device is in VIDEO PLAYBACK MODE.

7.2 View 2 Cameras - Picture in Picture (PIP) Mode

1. Ensure that you are in quad camera view mode by pressing the '⊞' button
2. Press '**PIP**' button
3. Press '**Enter**' to scroll through PIP camera modes. Use left, right, up and down to shift the small picture around the screen.

8. Video Playback Mode

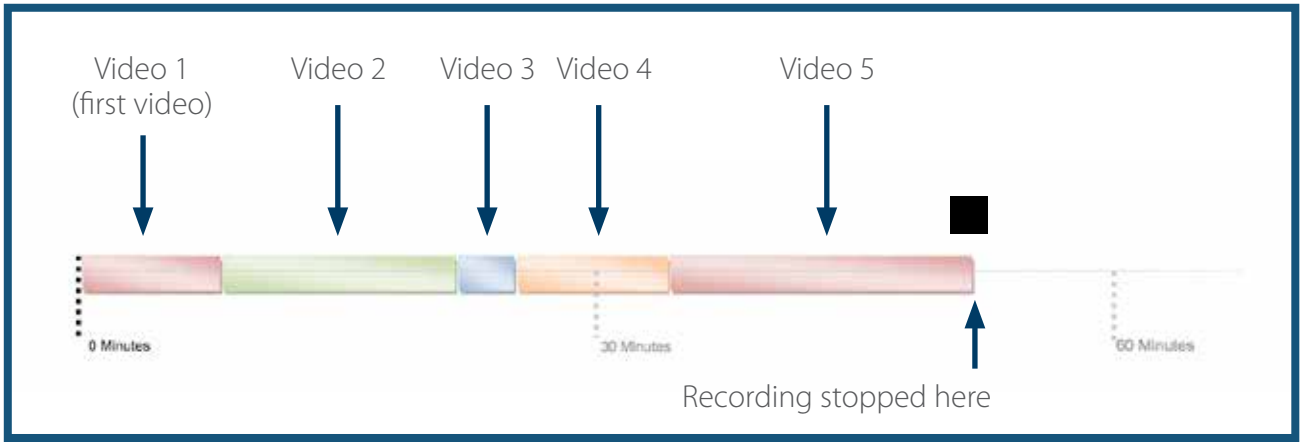
NOTE: This function can be executed while still recording. By completing the following instructions, you will be granted access to the video file you are currently recording too if you are in record mode.

NOTE: Single or all 4 cameras can be viewed and analysed individually or in 4Cam view when device is in VIDEO PLAYBACK MODE.

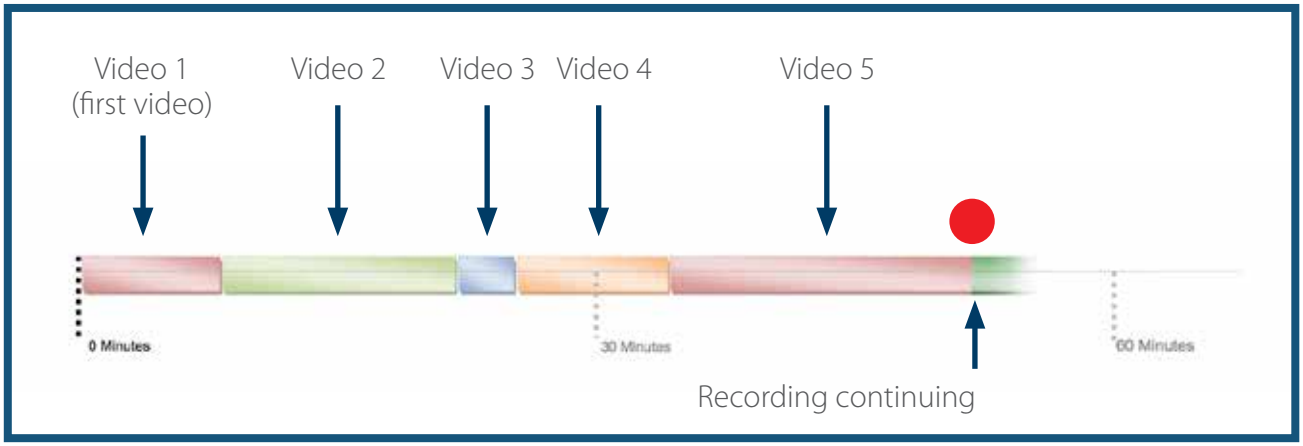
1. Enter PLAYBACK MODE by pressing the '**Search**' button and select (Press '**Enter'** on) GO TO LAST. This will take you to the end of the last recorded file or will take you to the end of the file you are currently recording to.

EXAMPLE:

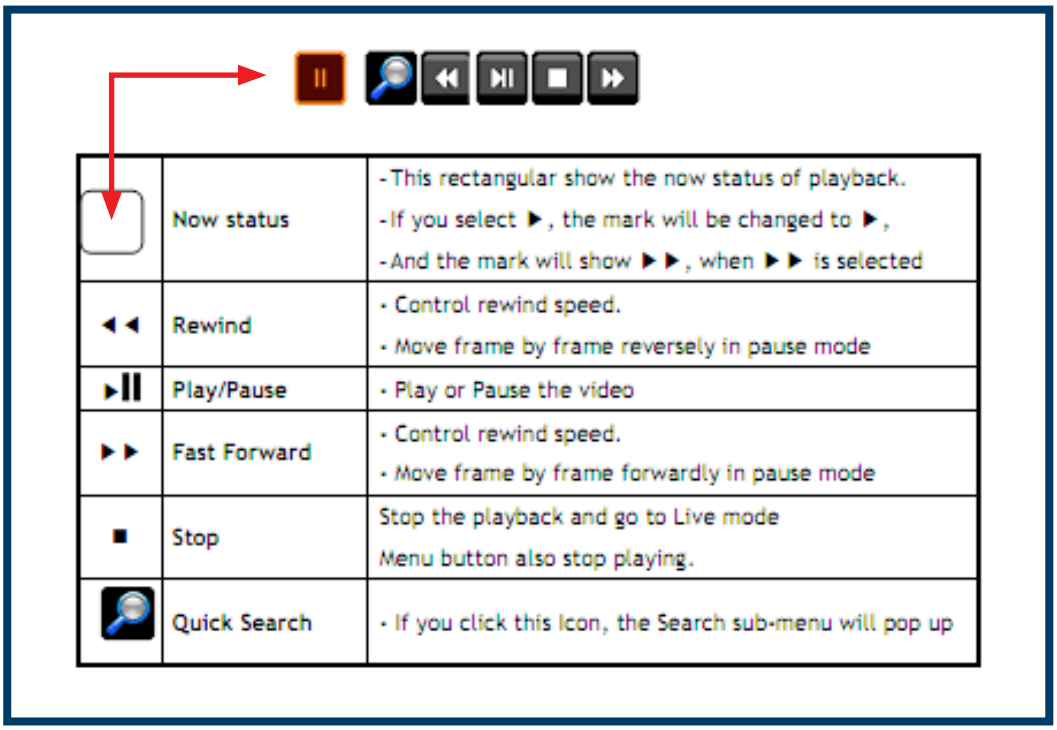
Press '**Search**' then GO TO LAST when not recording:
In the recording file example below - *while not recording* - if you press, '**Search**' then GO TO LAST, this will take you to the end of *video 5*.



Press '**Search**' then GO TO LAST when recording:
In the recording file example below - while recording - if you press, '**Search**' then GO TO LAST, this will take you to the end of *video 5* while you are recording to *video 5* with approximately a 5 second delay.



You are now in PLAYBACK MODE and have access to the following functions



	Now status	- This rectangular show the now status of playback. - If you select ▶, the mark will be changed to ▶, - And the mark will show ▶▶, when ▶▶ is selected
◀◀	Rewind	· Control rewind speed. · Move frame by frame reversely in pause mode
▶II	Play/Pause	· Play or Pause the video
▶▶	Fast Forward	· Control rewind speed. · Move frame by frame forwardly in pause mode
■	Stop	Stop the playback and go to Live mode Menu button also stop playing.
	Quick Search	· If you click this Icon, the Search sub-menu will pop up

8.1 Rewind Video & Reverse Analyse Video

a. Enter PLAYBACK MODE by pressing the '**Search**' button and select (Press '**Enter**' on) '**Go to Last**'. *This will take you to **the end of the last recorded file** or will take you to the '**end**' of the file you are currently recording too. You are now in PLAYBACK MODE and have access to the following functions*

b. To *slow rewind*, Press '**Play/Pause**' button to enter PAUSE MODE. The icon should now be displayed and the time indicator will be paused

c. Press '**Rewind**' repeatedly to advance backward approximately 1/3 of a second per press

d. To *fast rewind*, ensure that you are in PLAY MODE by pressing the '**Play/Pause**' button The icon should be displayed and the time indicator should be progressing forward

e. Press '**Rewind**' once to begin rewinding. The rewind ratio is approximatly 7/1 (7 video seconds per rewind second)

f. Press '**Stop**' to exit PLAYBACK MODE and return to live footage.

8.2 Fast Forward & Forward Analyse Video

a. Enter PLAYBACK MODE by pressing the '**Search**' button and select (Press '**Enter**' on) GO TO LAST. *This will take you to **the end of the last recorded file** or will take you to the '**end**' of the file you are currently recording too. You are now in PLAYBACK MODE and have access to the following functions.*

b. To *frame-by-frame progress forward*, Press '**Play/Pause**' button to enter PAUSE MODE. The icon should now be displayed and the time indicator will be paused

c. Press '**Fast Forward**' repeatedly to advance forwards approximately 1/10 of a second per press

d. To *fast forward*, ensure that you are in PLAY MODE by pressing the '**Play/Pause**' button. The icon should be displayed and the time indicator should be progressing forward. Press '**Fast Forward**' button to advance forward. Press '**Stop**' to exit PLAYBACK MODE and return to live footage.

9. Training Calender Video Playback Mode

NOTE: This function can be executed while still recording. By completing the following instructions, you will be granted access to the video file you are currently recording too if you are in record mode.

NOTE: Single or all 4 cameras can be viewed and analysed individually or in 4Cam view when device is in CALENDER MODE.

1. Enter CALENDER MODE by pressing the '**Search**' button and select (Press '**Enter**' on) SEARCH BY CALENDER. This will take you to the following screen:

2. Navigate around this page with the '**Up, Down, Left, Right**' buttons and make a selection with the '**Enter**' button.

Steps:

a. Choose the month (ensure that the buttons are highlighted with a thin orange square).

b. Press '**Down**' and then '**Enter**' to choose your day.

c. Once your day is chosen, you can choose your hour. Press '**Enter**' (the small grey box represents your selection)

d. Once your hour is selected, you can choose your minute. Press '**Enter**' (the small blue box represents your selection)

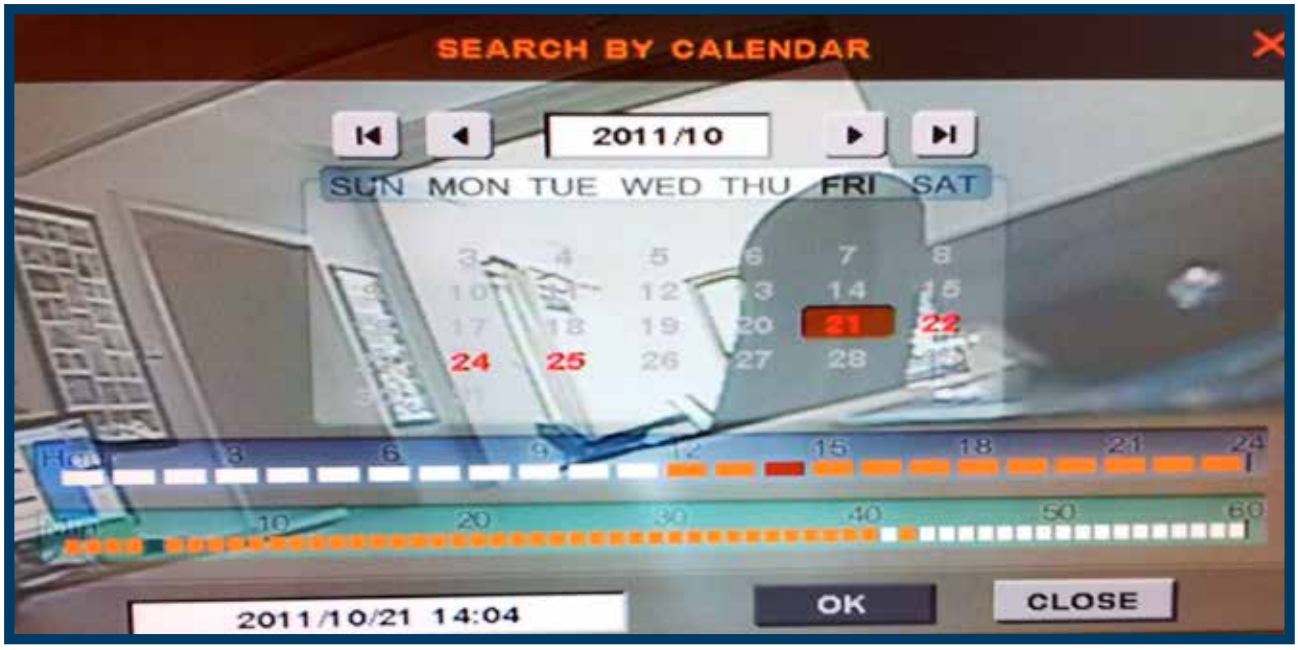
EXAMPLE: You may want to find a training session on the 21st of October at 2:05pm (14th hour and 5 minutes):

1. Find October (2011/10) using the top buttons

2. Press **'Down'** and highlight the 21st day - press **'Enter'** on the 21st day.

3. Select the hour 14 (2:00pm) and press **'Enter'** (box will turn from grey to red)

4. Find the 5th minute and press **'Enter'**



10. Delayed Playback/Time Shift

1. Take note of the LIVE TIME displayed on the bottom centre of the screen. We recommend you synchronize a wrist watch – for example -to this time if you would like precise delayed playback times.
2. Enter PLAYBACK MODE by pressing the '**Search'** button and select (Press '**Enter**' on) GO TO LAST. This will take you to the end of the last recorded file or will take you to the 'end' of the file you are currently recording too. You will be in PLAY MODE initially and will be viewing the footage that was just recorded (technically, this is called CHASE PLAY – you are chasing the live recording).
3. The difference between the LIVE TIME and the video PLAYBACK TIME is your delayed playback.

For example:	*Suppose live time is*	**12:30:50**
	Suppose playback time is	**12:30:35**
	THEN	
	Delayed Playback is	**15 Seconds**

4. Press '**Stop**' to exit PLAYBACK MODE and return to live footage.

11. Download to USB/External Hard Drive

11.1. Download 2,3 or 4 Cameras to USB (PC)

a. Plug in your USB or external hard drive (or both) into either or both USB ports on the front and rear panels of the recorder

b. Press '**Backup'** to enter BACKUP' screen and navigate around using the '**Up**' and '**Down**' navigation buttons

c. Press '**Enter**' on the text field you would like to change

NOTE: The backup function allows you to download videos to your USB device. You can select a time and date period that you wish to download. For example, if you wish to download the last hour of video footage from your coaching session today (assuming – for this example, today is the 21/02/2010 and the time is 9 o'clock), then input the following:

FROM 21/02/2010 09:00:00
TO 21/02/2010 08:00:00

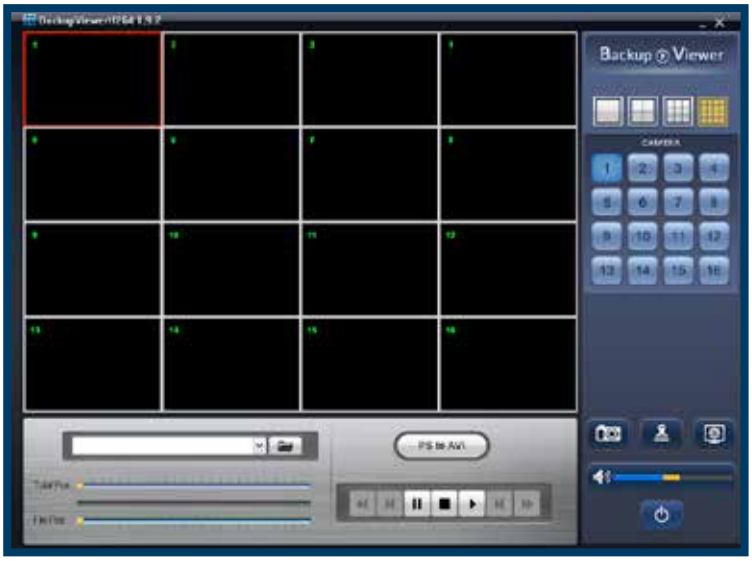
If you wish to download video recordings from an entire weeks coaching, then input the following:

FROM 14/02/2010 09:00:00
TO 21/02/2010 09:00:00

4. Ensure that ALL is ticked (to the right of 'CHANNEL'). This indicates that all 4 camera recordings will be downloaded and select BACKUP

NOTE: When 2, 3 or 4 cameras are downloaded, the Swim Pro 4Cam recorder will place 4 camera viewing software on the external device for viewing all 4 cameras at once (this does not occur when 1 single camera is downloaded. A single camera video file is downloaded as an individual AVI video file and does not require the 4Cam software to view).

5. Plug your USB device into a PC. You should see a 'backup-viewer.exe' file. Run it. You should see the following.



6. Select the '**Quad View Icon**' in the upper right hand corner to change view from 16 to 4 cameras.

7. Select '**Open File Icon'** and navigate to your file on your USB device. The 2 or 3 or 4 camera file is in .PS format and has the following layout:

YYYYMMDD_HHmmSSspDM.ps Or DDMMYYYY_HHmmSSspDM.ps

YYYY = Year e.g. 2028, MM = Month e.g. 08, DD = Day e.g. 23
HH = Hour e.g. 05, mm = Minute e.g. 59, SSm = Seconds e.g. 27

EXAMPLE: the file would be:
20280823_055927spDM.ps

The above file gets its name from the **FROM** input on the backup screen.

8. The file should begin to play. If not, press the '**Play**' button.

9. Double click the camera recordings to maximize/minimize to/from full screen mode

11.1.1. Create Individual Video Files from 2, 3 or 4 Camera Recordings (MAC & PC)

1. While in backup viewer, select ' PS to AVI ' button. You will be presented with the AVI CONVERT screen. This feature allows you to break the 2, 3 or 4 camera file into individual .avi files.
2. Select your file under input
3. Select if you would like your audio overlay and select the camera channel
4. Select your output file name and press '**Convert**'
5. Plug in your USB or external hard drive (or both) into either or both USB ports.

11.2. Download Single Camera to USB (MAC & PC)

1. Plug in your USB or external hard drive (or both) into either or both USB ports on the front and rear panels of the recorder.
2. Press '**Backup**' to enter BACKUP screen and navigate around using the '**Up**' & '**Down**' navigation buttons.
3. Press '**Enter**' on the text field you would like to change

NOTE: The backup function allows you to download videos to your USB device. You can select a time and date period that you wish to download. For example, if you wish to download the last hour of video footage from your coaching session today (assuming – for this example, today is the 21/02/2010 and the time is 9 o'clock), then input the following:

FROM 21/02/2010 09:00:00

TO 21/02/2010 08:00:00

If you wish to download video recordings from an entire weeks coaching, then input the following:

FROM 14/02/2010 09:00:00

TO 21/02/2010 09:00:00

4. Ensure that only 1 Channel (CH1 or CH2..) is ticked (to the right of 'CHANNEL'). This indicates that only 1 camera recording will be downloaded
5. Select '**Backup**' to download to USB device.

NOTE: When 2, 3 or 4 cameras are downloaded, the Swim Pro 4Cam recorder will place 4 camera viewing software on the external device for viewing all 4 cameras at once (this does not occur when 1 single camera is downloaded. A single camera video file is downloaded as an individual AVI video file and does not require the 4Cam software to view).

6 Plug your USB device into a PC. If you are unable to play the file with your current media player, we suggest you download the universal/free VLC Player from http://www.videolan.org/vlc/

12. Automatic Delete

The system allows for an automatic delete option. For example, if recording training once every three days you may wish to set the automatic delete to every three days. The system will automatically delete everything other than the last three days of recordings.

1. Go to menu and select '**Setup**.'
2. Scroll to RECORD and select by pressing '**Enter.**'
3. Scroll to MISC and select by pressing '**Enter**.'
4. Scroll to AUTO DELETE and select by pressing '**Enter,**'
5. Enter desired amount of days and press **'Ok**' to continue. Press '**Ok**' again.

NOTE: The system will continually delete any data recorded prior to, as per the example, the previous three days.

13. Microphone/Audio Setup

Lapel microphones may be used alongside video recordings as an additional coaching tool. This allows coaches to record commentary while recording video footage.

NOTE: The camera chosen for use with audio must be used in channel 1 only (plugged into 'Video in 1' via BNC cord at back of recorder.) Audio will be recorded to channel 1 only.

1. Have 4Cam recorder set up for video recording.
2. Open the back of wireless microphone and ensure the switch on the right is on 'mic' and battery is inserted.
3. Attach microphone cord to top of wireless microphone box.
4. Plug shure power supply into shure receiver box
5. Plug amplifier cord into 'balance out' on shure receiver box and the other end into 'mic in' on mixer.
6. Plug USB power supply into mixer and the other end into the 4Cam recorder.
7. Plug white plug into 'output' on mixer and the other end into 'audio input' at back of 4Cam.
8. Plug other white plug into 'audio out' at back of 4 cam recorder and the other end into the white input on your LCD screen/TV.

9. For optimum sound we recommended the following settings:

Turn 'Mic' on mixer to 7.5

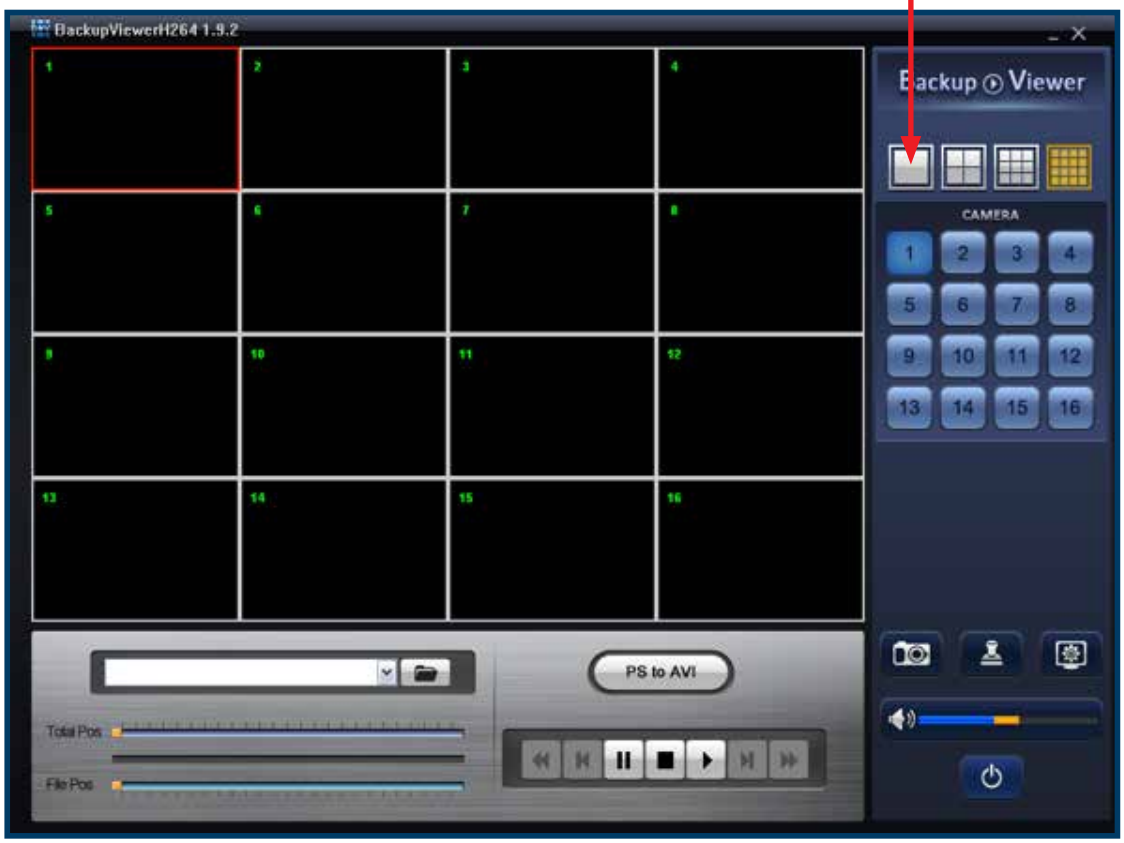
Turn 'Gain' on mixer to 4.5

Press **'Audio'** on your 4Cam remote. Turn 'Audio out' on and maximise. Change 'audio in' volume to be set at six bars (out of the possible nine.)

NOTE: You may choose to change the recommended settings followed in step nine to suit your individual surroundings.

10. To test the audio settings, you must press '**1**' on your remote (channel one full screen) to hear audio through your screen .You may choose to keep recording both video and audio without sound feedback by either returning to the 4Cam view or simply muting your TV/LCD.

NOTE: When downloading footage using 'backup viewer.exe' you will need to choose full screen mode to hear the audio



13. iPad/iPhone/Tablet/Smartphone Connectivity

Video footage may be viewed via a wireless router to your Smartphone or iPad anywhere in range of the wireless signal. This allows freedom of movement for coaches and also allows parents / observers to also connect and watch from their own device. User and password options allow restrictions to be set as per the coach's discretion. For example, guests to the pool that wish to watch the current footage may use the username 'guest' and will be given the password. However, they will be limited to viewing the footage only. Coach's may use the username 'coach' and enter their password and will have further viewing options.

1. Set up 4Cam recorder with power supply and camera as usual
2. Plug Ethernet cable into the back of the recorder into any of the four slots at the back of the router
3. Enter the username and password on your 4Cam Recorder as usual
4. Using your remote or mouse, bring up the menu
5. Select (by pressing '**Enter**') SETUP
6. Select SETUP
7. Select NETWORK
8. Select SETUP
9. Click the heading 'type' and scroll to select 'static.'
10. Ensure the I.P address is : 192.168.001.002

NOTE: when checking/setting this, ensure all wireless devices are disconnected from the SwimPro WIFI wireless network. This will ensure that the 4Cam Recorder is assigned to and receives the correct IP address.

11. Ensure gateway is: 192.168.001.001
12. Ensure netmask is: 255.255.255.000
13. Press '**Ok**'.

With App method (preferred)

ANDROID:

1. Connect to your Swim Pro Wi-Fi on your chosen device
2. Enter password: underwater
3. Download the '*DVroid*' app using your device (through google 'play store.')
4. Once downloaded, open the app
5. Enter default login password 'admin'

6. Enter DVR name 'Swim Pro'

7. Enter IP address: 192.168.001.002

8. Enter port: 7620

9. Enter user id 'admin' (or your chosen username, see 'note' below)

10. Enter password 0000 (or your chosen password, see 'note' below)

11. Press button to view footage. You may view single or multiple cameras' (if in use) on your screen

12. Press to view full screen. Be sure to select the correct channel if only one camera is in use or if you wish to view only one of the cameras' recording.

NOTE: the username 'admin' is a default password. You may also choose to use 'coach' 0000, or 'guest' 1111 which has predetermined restrictions. To edit or create your own usernames and passwords go to the menu, select 'setup', select 'system' then select 'user.' Enter your chosen username and password and select 'set' to choose your viewer discretion options. Ensure the 'setup' and 'network' boxes are ticked.

APPLE PRODUCTS:

1. Connect to your Swim Pro Wi-Fi on your chosen device

2. Enter password: underwater

3. Download and install '*aViewer*'

4. Enter default login password 'admin'

5. Enter DVR name 'Swim Pro'

6. Enter IP address: 192.168.001.002

7. Enter port: 7620

8. Enter user id 'admin' (or your chosen username, see 'note' below)

9. Enter password 0000 (or your chosen password, see 'note' below)

10. Select 'Swim Pro' from DVR list

11. Press to view full screen.

SWIMPRO®

performanceswimmingcameras

Please do not hesitate to contact us via email or phone with any questions you may have.
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